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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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WRB-IP LLP 1217 KING STREET ALEXANDRIA, VA 22314			EXAMINER BARTOSIK, ANTHONY N	
			ART UNIT 3609	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/779,636

Applicant(s)

ZEIGLER, THEODORE R.

Examiner

Anthony N. Bartosik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date February 18, 2004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: the last part of the 5th line of claim 1 reads "substantially adjacent and an expanded position." It appears that the "and an" phrase is a typographical error. Appropriate correction is required.
2. Claim 17 is objected to because of the following informalities: Claim 17, as written depends from itself. For examination purposes, claim 17 is considered to depend from claim 16. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claim 14 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 14 appears to be a duplicate of claim 13.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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2. Claims 1-10, 15, 23-29, 32-40, and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Esser et al. (US 5,943,837).

3. In Re claim 1, Figures 2a and 8a; and Column 17 Lines 247-49 of Esser et al. discloses at least one scissor assembly comprising a first and a second strut (28), the first and the second strut (28) each having first and second ends and being pivotably attached to each other such that the scissor assembly is movable between a folded position in which the first end of the first strut (28) and the second end of the second strut (28) are substantially adjacent and an expanded position; a first spacer (34) disposed between the first end of the first strut (28) and the first end of the second strut (28) when the scissor assembly is in the expanded position; a second spacer (34) disposed between the second end of the first strut (28) and the second end of the second strut (28) when the scissor assembly is in the expanded position; and a tension member (150) connected to the first and second struts (28), wherein the tension member is arranged such that the scissor assembly is moved from the folded position when there is slack in the tension member to the expanded position when the slack in the tension member is taken up. For clarification purposes, examiner notes that both the first and second strut will be referenced by the same numeral (28), as Esser et al. does not make a distinction.

4. In Re claim 2, Figure 8a of Esser et al. discloses a plurality of scissor assemblies connected end to end such that a second end of a second strut (28) and a second end of a first strut (28) of a first scissor assembly is pivotably connected (70) to a first end of a first strut (28) and a first end of a second strut (28) of a second scissor assembly,

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respectively, the second spacer (34) for the first scissor assembly serving as the first spacer (34) for the second scissor assembly.

5. In Re claim 3, Figure 1, Column 1 Lines 27-30 of Esser et al. discloses a plurality of scissor assemblies connected end to end defines a bank of scissor assemblies, the structure including at least two banks of scissor assemblies and at least one lateral scissor assembly including first and second struts (28) pivotably connected at ends thereof to ends of the first and second struts (28) of at least one scissor assembly of each of the banks of scissor assemblies.

6. In Re claim 4, Esser et al. discloses two banks of scissor assemblies that are substantially identical.

7. In Re claim 5, Esser et al. discloses at least one lateral scissor assembly that is disposed at each end of each scissor assembly.

8. In Re claim 6, Figure 1 of Esser et al. discloses first and second struts (28) of each lateral scissor assembly being pivotably connected to each other.

9. In Re claim 7, Figure 1 of Esser et al. a first and second struts (28) of each lateral scissor assembly being pivotably connected to each other at center points of the first and second struts (28).

10. In Re claim 8, Figure 1 and Column 7 Lines 1-6 of Esser et al. a cover (22) disposed on at least one of an inner side and an outer side of the connected banks of scissor assemblies.

11. In Re claim 9, Figure 1 and Column 7 Lines 1-6 of Esser et al. discloses a cover (22) that is disposed on the outer side of the connected banks of scissor assemblies.

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12. In Re claim 10, Figure 1 and Column 7 Lines 1-6 of Esser et al. discloses a cover (24) that is disposed on the inner side of the connected banks of scissor assemblies.

13. In Re claim 15, Figure 1, Column 1 Lines 35-36 of Esser et al. disclose first and second spacers that each include tubular members.

14. In Re claim 23, Figure 8 of Esser et al. discloses a tension member that extends from a first end of at least one of the first and second struts (28) to a second end of the one of the first and second struts (28).

15. In Re claim 24, Figures 8(a-f) of Esser et al. discloses at least one pulley (152) disposed at at least one of the first and second ends of at least one of the first and second struts (28), the tension member (150) extending around the pulley.

16. In Re claim 25, Figures 1 and 8 of Esser et al. discloses a tension member that extends from a first end of the first strut (28) to a second end of the first strut (28).

17. In Re claim 26, Figures 1 and 8 of Esser et al. discloses a tension member (150) extends from a first end of the second strut to a second end of the second strut.

18. In Re claim 27, Figures 8(a-f) of Esser et al discloses at least one pulley (152) disposed at at least one of the first and second ends of at least one of the first and second struts, the tension member (150) extending around the pulley.

19. In Re claim 28, Figures 1 and 8 of Esser et al. discloses a plurality of scissor assemblies connected end to end such that a second end of a second strut (28) and a second end of a first strut (28) of a first scissor assembly is pivotably (70) connected to a first end of a first strut (28) and a first end of a second strut (28) of a second scissor

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assembly, respectively, the plurality of connected scissor assemblies defining an arch shape when in the expanded condition.

20. In Re claim 29, Figures 1 and 8 of Esser et al. discloses a plurality of connected scissor assemblies including a first end scissor assembly and a second end scissor assembly at opposite ends of the plurality of connected scissor assemblies, the arch being shaped such that the first ends of the first and second struts of the first end scissor assembly are substantially coplanar with the second ends of the first and second struts of the second end scissor assembly.

21. In Re claim 32, Figures 2a and 8a; and Column 17 Lines 247-49 of Esser et al. discloses at least one scissor assembly comprising a first and a second strut (28), the first and the second strut (28) each having first and second ends and being pivotably attached to each other such that the scissor assembly is movable between a folded position in which the first end of the first strut (28) and the second end of the second strut (28) are substantially adjacent and an expanded position; and a tension member (150) connected to the first and second struts (28), wherein the tension member is arranged such that the scissor assembly is moved from the folded position when there is slack in the tension member to the expanded position when the slack in the tension member is taken up. Given the structure, method steps would inherently be preformed.

22. In Re claim 33, Figures 2a and 8a; and Column 17 Lines 247-49 of Esser et al. discloses unfolding the structure to a collapsed condition, the structure including at least one scissor assembly comprising a first and a second strut, the first and the second strut each having first and second ends and being pivotably attached to each other such

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that the scissor assembly is movable between a folded position in which the first end of the first strut and the second end of the second strut are substantially adjacent and an expanded position; when the structure is in a collapsed condition, taking up slack in a tension member, the tension member being connected to the first and second struts in such a manner that taking up slack draws the first ends of the first and second struts toward one another.

23. In Re claim 34, Figure 1 of Esser et al. discloses slack in the tension member (150) that is taken up until the first ends of the first and second struts (28) are separated by a distance defined by a spacer (34).

24. In Re claim 35, In Re claim 34, Figure 1 of Esser et al. discloses slack in the tension member (150) being taken up until the second ends of the first and second struts (28) are separated by a distance defined by a second spacer (34).

25. In Re claim 36, Figure 8a; and Column 17 Lines 247-49 of Esser et al. discloses a structure including a plurality of scissor assemblies connected end to end, the method including, after unfolding the structure from the folded position to the collapsed condition and before taking up slack in the tension member, securing at least one of a first and second strut of a scissor assembly at a first end of the plurality of connected scissor assemblies and at least one of a first and second strut of a scissor assembly at a second end of the plurality of connected scissor assemblies to a base. Given the structure, method steps would inherently be preformed.

26. In Re claim 37, Figure 1, Column 1 Lines 27-30 of Esser et al. discloses a plurality of scissor assemblies connected end to end that defines a bank of scissor

assemblies, the structure including at least two banks of scissor assemblies and at least one lateral strut connecting the banks of scissor assemblies, the method including taking up slack in tension members corresponding to each bank of scissor assemblies.

27. In Re claim 38, Figures 2a and 8a; and Column 17 Lines 247-49 of Esser et al. discloses slack in the tension members corresponding to each bank of scissor assemblies that is taken up substantially simultaneously.

28. In Re claim 39, Figures 2a and 8a; and Column 17 Lines 247-49 of Esser et al. discloses slack in the tension members corresponding to each bank of scissor assemblies is that taken up at different times.

29. In Re claim 40, Figure 1, Column 1 Lines 27-30 of Esser et al. discloses a plurality of scissor assemblies connected end to end defining a bank of scissor assemblies, the structure including at least two banks of scissor assemblies and at least one lateral scissor assembly including first and second struts pivotably connected at ends thereof to ends of the first and second struts of at least one scissor assembly of each of the banks of scissor assemblies.

30. In Re claim 42, Figure 1, Column 1 Lines 27-30 of Esser et al. discloses a plurality of scissor assemblies connected end to end defines a bank of scissor assemblies, the structure including at least two banks of scissor assemblies and at least one lateral scissor assembly connecting the banks of scissor assemblies, the method including unfolding the at least one lateral scissor assembly substantially simultaneously with unfolding the scissor assemblies in the at least two banks of scissor assemblies.

Claim Rejections - 35 USC § 103

31. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

32. Claims 11 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esser et al. (US 5,943,837) in view of Schafer (US 3,354,596).

33. In Re claim 11, Esser et al. has been discussed above and teaches all the limitations of claims 1 and 3 from which 11 depends. Esser et al., however fails to teach struts that are telescoping. Figures 1 and 2 of Schafer teach a lateral scissor assembly that employs telescoping struts. It therefore, would have been obvious to one skilled in the art at the time of the invention to combine the telescoping struts as taught by Schafer with the struts of Esser et al. in order to create a collapsible tent structure that could compress to a smaller and more compact size when collapsed.

34. In Re claim 41, Esser et al. has been discussed above and teaches all the limitations of claims 1 and 3 from which 11 depends. Esser et al., however fails to teach struts that are telescoping. Figures 1 and 2 of Schafer teach a lateral scissor assembly that employs telescoping struts. It would have been obvious to one skilled in the art at the time of the invention to modify the telescoping struts as taught by Schafer with the struts of Esser et al. in order to create a collapsible tent structure that could compress to a smaller and more compact size when collapsed. Concerning claim 41, the

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combination renders the claimed method steps obvious since such would be a logical manner of using the combination.

35. Claims 13, 14, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esser et al. (US 5,943,837) in view of Zeigler (US 4,437,275) ("Zeigler '275").

36. In Re claims 13,14 and 30, Esser et al. has been discussed above and teaches a first and second struts of at least one other scissor assembly of the plurality of scissor assemblies being pivotably connected to each other, however, Esser et al. does not teach pivotably connecting the struts at points offset from the centerpoint. Figure 5 of Zeigler '275, does teach first and second struts of at least one other scissor assembly of the plurality of scissor assemblies that are pivotably connected to each other at points offset from centerpoints of the first and second struts to facilitate collapsing the structure. It would have been obvious to one skilled in the art at the time of the invention to modify the struts of Esser et al. with the struts as taught by Zeigler '275 in order to facilitate collapsing the structure.

37. In Re claim 30, Esser et al. has been discussed above and teaches at least one scissor assembly including at least one sliding scissor assembly, first and second struts of the sliding scissor assembly being pivotably connected, however, Esser et al. does not teach the scissor assembly being and slidable relative to one another. Figure 5 of Zeigler '275 teaches at least one scissor assembly including at least one sliding scissor assembly, first and second struts of the sliding scissor assembly being pivotably connected and slidable relative to one another to facilitate collapsing the structure. It

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would have been obvious to one skilled in the art at the time of the invention to modify the struts of Esser et al. with the struts as taught by Zeigler '275 in order to facilitate collapsing the structure.

38. In Re claim 31, Esser et al. has been discussed above and teaches at least one scissor assembly including at least one sliding scissor assembly, first and second struts of the sliding scissor assembly being pivotably connected, however, Esser et al. does not teach at least one of the first and second struts of the at least one sliding scissor assembly including a longitudinal groove, a pivot pin extending through the longitudinal groove pivotably and slidably connecting the first and second struts of the at least one sliding scissor assembly. Figure 5 of Zeigler '275 teaches at least one of the first and second struts of the at least one sliding scissor assembly including a longitudinal groove, a pivot pin extending through the longitudinal groove pivotably and slidably connecting the first and second struts of the at least one sliding scissor assembly.

39. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esser et al. (US 5,943,837) in view of Etheridge (US 5,930,971).

40. In Re claim 16, Figure 1 of Esser et al. teaches the use of spaces, but it does not teach the use of a tension member extending through at least part of the first and second spacer. Figure 1, 3 and Column 5 Lines 36-43 of Etheridge teaches a tension member extending through at least part of a spacer, which would make it more aesthetically pleasing. It would have been obvious to one skilled in the art at the time of the invention to modify the spacers of Esser et al. with the tensioned spacer of

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Etheridge in order to allow the tension member to be internal within the collapsible structure, thereby, making it more aesthetically pleasing.

41. In Re claim 17, the combination of Esser et al. and Etheridge as described in directly above would render claim 17 as obvious since extending a tension member through a first and second spacers from a first end of each spacer to a second end of each spacer would be a logical result of the combination.

42. **Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Esser et al. (US 5,943,837) in view of Zeigler (US 5,274,980) hereafter ("Zeigler '980").** Esser et al. has been discussed above. Esser et al. discloses tubular member, but does not disclose the tubular members to include separable first and second halves, ends of the first and second halves abutting when the slack in the tension member is taken up. Figure 13 a-d of Zeigler '980 teaches tubular members each including separable first and second halves, ends of the first and second halves abutting when the slack in the tension member is taken up. It would have been obvious to one skilled in the art at the time of the invention to modify the tubular spacers of Esser et al. with the tubular spacers of Zeigler '980 to allow each spacer to remain affixed to the scissor assembly during operation.

43. **Claim 19-22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Esser et al. (US 5,943,837) in view of Nelson (US 4,539,789).**

44. In Re claim 19, Esser et al. has been discussed above. Esser et al. teaches a tension member in use with the scissor assembly, however, Esser et al. fails to teach a tension member fixed at one end to an end of the at least one scissor assembly. Figure

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5 and Column 6 Lines 34 of Nelson teach a fixed tension member fixed at one end to an end of a collapsible structure, which would create a taller ceiling. It would have been obvious to one skilled in the art at the time of the invention to modify the tension member fixing point of Esser et al. to the end of the scissor assembly of the collapsible structure as taught by Nelson in order to create a taller ceiling.

45. In Re claim 20, Figure 5 and Column 6 Lines 34 of Nelson further teaches a reel secured at an opposite end of the tension member, the reel being adapted to take up and release slack in the tension member.

46. In Re claim 21, Figure 5 and Column 6 Lines 34 of Nelson further teaches a motor (51).

47. In Re claim 22, Figure 5 and Column 6 Lines 34 of Nelson further a reel secured at at least one end of the tension member, the reel being adapted to take up and release slack in the tension member.

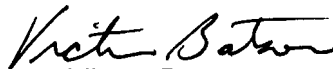
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miyano et al. (US 4,539,789), Carter (2002/0189659), Beaulieu (US 4,156,433). Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony N. Bartosik whose telephone number is 2723600. The examiner can normally be reached on M-F 7:30-5:00; Alter Fri Off E.D.T.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Batson Victor can be reached on 571-272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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AB
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